<u>Deviation from Vessel Operating Requirements.</u> Deviation from vessel operating requirements may be made when the safety of passengers or the vessel is immediately threatened. Where possible, operators shall notify the Park Service before the deviation. In all cases, notifications must be made as soon as it is safe to do so.

#### BASIS FOR THE DECISION

This section provides the rationale for the decision described in the previous section. The basis for the decision stems from the objectives, purposes, and need for vessel management in Glacier Bay National Park and Preserve, including:

- protecting park resources and values.
- providing for visitor demand for motor vessel access to Glacier and Dundas Bays.
- providing a range of visitor experiences consistent with the purposes and values of Glacier Bay National Park and Preserve.
- improving operating requirements to make them more effective and easier to understand and implement.

The Park Service considered six sets of quotas and operating requirements that would meet these objectives in various ways and to varying degrees. Based on the analysis presented in the FEIS, public input, and discussions among park staff and management, the option selected was determined to meet these objectives best.

As mentioned above, this decision modifies alternative 6. Among other things, alternative 6 would impose: 1) a year-round, 13-knot speed limit for vessels greater than or equal to 262 feet (80 meters) throughout Glacier Bay for protection of humpback whales, 2) a year-round, 0.25 nautical mile vessel approach distance to a seal hauled out on ice in Johns Hopkins Inlet, and 3) motor vessel limits in Dundas Bay.

Year-round 13-knot speed limit throughout Glacier Bay for large vessels. The Park Service has decided to impose, as necessary, a 13-knot, Glacier Bay wide speed limit for vessels greater than or equal to 262 feet (80 meters). This approach will eliminate an unnecessary imposition of the speed restriction on cruise ships during times when and in areas where whales are not present. The restriction would be imposed as necessary during the year to protect whales; for example, when whales are abundant and dispersed throughout the Bay.

Year-round vessel approach distance to harbor seals. The year-round vessel approach distance of less than 0.25 mile to harbor seals hauled out on ice in Johns Hopkins Inlet was not included because, based on a review of existing information and consultation with harbor seal biologists, it was determined that extending the vessel approach distance timeframe from July 1 through August 31 to year-round would not substantially benefit harbor seals and may unnecessarily restrict vessel traffic. Three principal factors form the basis of the decision not to extend the timeframe:

- Harbor seal presence in Johns Hopkins Inlet declines significantly outside the summer months.
- Vessel traffic declines in fall and winter, so the risk of vessel disturbance to harbor seals is lower
- Harbor seals tend to spend less time out of the water during fall and winter, so vessel disturbance has less of an energetic cost for them.

Motor vessel limits in Dundas Bay. Existing conditions do not support immediate implementation of motor vessel limits in Dundas Bay. Studies and monitoring are insufficient to support the need for limits at this time. The Park Service will impose limits when a clearer need is established. The Park Service will undertake study and monitoring of use and resource conditions in Dundas Bay.

#### **Protection of Park Resources and Values**

Although the selected alternative potentially provides for the highest vessel numbers in Glacier Bay during the current quota season (June 1 through August 31), increased resource protection is provided by extending the seasonal-use day quota season for cruise ships to include May and September, requiring the superintendent to carefully evaluate studies before allowing any increase in cruise ship numbers, and revising operating requirements.

The revised operating requirements included in the selected alternative to improve protection of park resources include:

- the extension, to September 30, of the speed limit and vessel routes (mid-channel or 1 nautical mile from shoreline) in the designated whale waters of lower Glacier Bay.
- the 13-knot speed limit for vessels greater than or equal to 262 feet (80 meters) throughout Glacier Bay when the superintendent has designated a reduced speed due to the presence of humpback whales.
- the closure of Beardslee Entrance and the entrance to Adams Inlet to cruise ships.
- the closure of Beardslee Entrance and the entrance to Adams Inlet to tour vessels.

The following paragraphs provide the basis for each of these revised operating requirements.

Speed Limits for Whale Protection. Current regulations restrict vessel speeds to 20 knots from May 15 through August 31 in the lower Glacier Bay whale waters and require that all vessels remain mid-channel or less than 1 nautical mile from shoreline. Under the decision, the timeframe for the lower Glacier Bay speed limit and vessel route will be extended to September 30. The extension would increase protection to humpback whales, which are quite often abundant in Glacier Bay through September.

As is already authorized by current regulations, the superintendent may designate temporary whale waters and impose motor vessel speed restrictions in all whale waters. Avoidance of vessel/whale collisions is one of the main determining factors for vessel speed limits in whale waters. A recent study indicated that vessels greater than or equal to 262 feet (80 meters) in length traveling at speeds of less than 14 knots are less likely to result in whale mortality if a collision occurs. In keeping with the results of this study, when the superintendent designates temporary whale waters, the imposed speed limit will be 13 knots rather than the current 10 knots. In addition, the superintendent may also impose, as necessary, a 13-knot speed limit for motor vessels greater than or equal to 262 feet (80 meters) in all of Glacier Bay when humpback whales are abundant and widely distributed.

Non-Motorized (Closed) Waters for Cruise Ships and Tour Vessels. In addition to areas closed under current regulations, the Park Service will close the entrance to Adams Inlet and Beardslee Entrance in Glacier Bay to cruise ships and tour vessels. The reasons for these closures are to reduce the chance of cruise ship and/or tour vessel groundings and to enhance opportunities for charter and private vessels and backcountry visitors to experience these areas without larger vessels. In terms of vessel safety:

- Glacial rebound and silting from Casement Glacier has caused Adams Inlet to become very shallow and unsafe. Closing the entrance to Adams Inlet to cruise ships and tour vessels would reduce the likelihood of large-vessel accidents in this area.
- The Beardslee Entrance has a narrow configuration and shallow depth which can result in strong tide rips and opposing currents. These factors can pose a safety hazard for large vessels traveling in the area. Beardslee Entrance also is close to the Beardslee Islands Wilderness complex, a marine wilderness area that is seasonally closed to all motorized use and home to sensitive resources. A vessel grounding in the entrance could cause catastrophic environmental damage to wildlife within these protected waters of the Beardslee Islands.

## **Providing for Visitor Demand for Motor Vessel Access**

In terms of vessel quotas, the analysis presented in the EIS provided no compelling reason to either increase or decrease vessel numbers in Glacier Bay. The Park Service does not wish to unnecessarily restrict or regulate motorized vessel traffic. One of the objectives of vessel management is to respond to increasing demand for motorized vessel access in Glacier and Dundas Bays. Based on the analysis presented in the FEIS, the existing level of vessel traffic in Glacier Bay has not resulted in "impairment" or unacceptable levels of adverse effects. The option selected provides the opportunity to increase cruise ships to the number decided upon in the 1996 FONSI. This allows the Park Service the flexibility to provide more opportunities for people to visit Glacier Bay. Currently, over 90 per cent of park visitors experience the park on board cruise ships. Studies and monitoring are insufficient to warrant immediate implementation of motor vessel limits for Dundas Bay at this time.

Visitor demand for motor vessel access will be met by an increase in seasonal-use days for private vessels and the potential for increases in seasonal-use days for cruise ships during the current quota season (June 1 through August 31). In addition, the elimination of a seasonal entry quota while retaining the seasonal-use day quota provides more versatility by allowing the opportunity for vessels to leave and reenter Glacier Bay on one permit within the same vessel-use day.

The way permits are issued also will be improved for private vessels: in addition to the elimination of the seasonal entry quota, a limited number of short-notice permits also will be available. Under the current regulations, most permits are made available 60 days in advance of the entry date and are in high demand, so obtaining a permit on short notice is very difficult. A short-notice permit system will allow vessel operators to obtain a permit within 48 hours of entry to Glacier Bay, on a space available basis.

Under this decision, the current permit exemption for vessels based in Bartlett Cove (which is where the NPS dock and headquarters are located) will be eliminated. The based in Bartlett Cove exemption allowed vessels which were home-based out of Bartlett Cove to enter and exit Glacier Bay without obtaining a vessel permit. Elimination of the based in Bartlett Cove exemption will result in optimizing the use of available private vessel permits. With the elimination of this exemption and the seasonal entry quota, these vessels will be able to obtain a short-notice permit and enter and exit as many times as needed during the same vessel-use day under the same permit, on a space available basis.

A research framework, developed with the assistance of a scientific advisory board, will help ensure that appropriate studies and monitoring will be undertaken to guide vessel management. This will include any decision(s) regarding possible increases in seasonal-use day numbers for cruise ships in Glacier Bay.

# **Range of Opportunities for Visitors**

The decision provides the superintendent with the ability to increase cruise ship seasonal-use days during the peak demand season (June through August). Initially, total allowable cruise ship seasonal-use days would decrease opportunities to visit Glacier Bay during May and September as compared to the current situation. However, cruise ships seasonal-use days could be increased in May and September up to the current number under the authority of the superintendent. The Park Service found no reason to either increase or decrease daily quotas for tour vessels, charter vessels, and private vessels. The elimination of the seasonal entry quota would increase the number of seasonal-use days for private vessels and, consequently, the opportunity for visitors to travel in Glacier Bay via private vessel.

The establishment of a "short-notice" permit system for private vessels will improve the opportunity for private vessel owners to obtain a vessel permit for Glacier Bay within a short period of time. The elimination of the seasonal entry quota will eliminate the need for the current internal allocation system for private vessel permits and the potential for the seasonal-use day limit for private vessels to be reached before the end of the summer season. It also will bring the private vessel quotas in line with the other vessel categories, in which the maximum number of vessel-use days during the June through August season equals the total seasonal-use day quota. (For private vessels that means 25 vessels per day times 92 days equals 2,300.) This adjustment to the current system will simplify the regulations, reduce the potential for denied access to private vessel owners, and reduce visitor confusion and frustration associated with the current system.

Closing the entrance to Adams Inlet and Beardslee Entrance to cruise ships and tour vessels will provide opportunity for charter and private vessels and backcountry visitors to experience these areas free from larger vessels.

### **Improving Vessel Operating Requirements**

The NPS decision will simplify or clarify operating requirements for vessel operators as follows:

Whale Water Geographic Locations. Currently, four areas are designated as whale waters: Whidbey Passage, Russell Island Passage, East Arm Entrance, and lower Glacier Bay. With the exception of lower Glacier Bay, whale use in these waters has been variable, and the Park Service has found that, with the exception of the lower Bay whale waters, these designations unnecessarily restrict vessel operators and complicate vessel management. Thus, the Park Service has decided to include only the waters of the lower Glacier Bay as designated whale waters. Experience since 1996 has shown that designating whale waters in the other areas where humpback whale presence is not consistent detracts from the effectiveness of the whale protection regulations because it makes the entire system overly complicated for park visitors, including commercial vessel operators. Protection of the areas formerly designated as whale waters will be accomplished via the superintendent's authority to designate temporary whale waters, as necessary; that is, anywhere whales are found to be gathering and staying for several days.

<u>Ferry Vessel Operating Requirements.</u> A definition of the passenger ferry service from Juneau to Bartlett Cove is not included in the current regulations because the law requiring this service was not enacted until after the regulations were promulgated in 1996. The Park Service believes it is appropriate to include a definition for this motor vessel service in the vessel regulations for Glacier Bay National Park and Preserve. The definition included is consistent with the language in law.

The Park Service considered other potential revisions to operating requirements meant to simplify the regulations in other alternatives in the EIS, but these were not included in this decision for the following reasons:

Measurement of Vessel Speed. Alternative 5 in the EIS includes a change in the way speed is measured, from "through the water" to "over the ground." Many private vessel operators use Global Positioning System technology to monitor their speed, and this change was included to reflect how many vessel operators now measure their speed. However, using ground speed does not account for currents, and Glacier Bay is known for extreme currents. For example, if a vessel travels against a 6-knot current, the vessel's speed through the water would be 6 knots faster than ground speed, and moving with such a current, a vessel's speed through the water would be 6 knots slower than ground speed. It was determined that this system of measurement could result in a hazardous situation in an extreme current. In addition, studies of vessel speed and its effects on humpback whales in Glacier Bay use speed as measured "through the water" rather than "over the ground." Continuing to measure speed as "through the water" will ensure comparability of study results. Taking these factors into consideration, speed will continue to be measured as "through the water."

<u>Vessel Routes</u>. Alternative 4 in the EIS included defined cruise ship routes as a way to reduce exposure of shorelines to the sight and sounds of cruise ships. However, the Park Service determined that defined cruise ship routes are not necessary, except in designated whale waters. In general, cruise ship operators travel in mid-channel and are required to have professional marine pilots on board, and the Park Service has found no reason to establish a new requirement.

### ENVIRONMENTALLY PREFERRED ALTERNATIVE

Alternative 4, identified as the environmentally preferred alternative in both the DEIS and FEIS, includes closure of more waters to cruise ships and tour vessels and provides more protection of resources through revised operating requirements than the other alternatives considered. In addition, by allowing the fewest numbers of cruise ships, tour vessels, and charter vessels, alternative 4 would provide for the lowest number, intensity, and duration of adverse effects to natural resources in Glacier Bay and Dundas Bay.

# **Vessel Quotas**

Alternative 4 calls for the greatest reduction in cruise ships and tour and charter vessels in Glacier Bay of the alternatives considered in the FEIS and regulates vessel traffic in Dundas Bay. Under alternative 4, seasonal limits would change from June through August as follows:

- a 33% reduction in cruise ship seasonal entries (from 139 to 92).
- a 33% reduction in the daily quota for tour vessels (from three to two) and a 33% reduction in seasonal-use days (from 276 to 184).
- a 17% reduction in the charter vessel daily vessel quota (from six to five) and a 17% reduction in charter vessel seasonal-use days (552 to 460)
- a 12% reduction in the private daily vessel quota (from 25 to 22)
- a 3% increase in private vessel seasonal-use days (from 1,971 to 2,024), due to the elimination of the seasonal entry quota.